## Ogulei, David

From: Garnett, Kim

Sent: Wednesday, October 08, 2014 1:28 PM

To: Ogulei, David Subject: FW: FYI

**From:** John Cooper [mailto:jacooper@cooperenvironmental.com]

Sent: Thursday, May 23, 2013 3:00 PM

To: Garnett. Kim

**Cc:** Bivins, Dan; andreag@cooperenvironmental.com; kragp@cooperenvironmental.com

Subject: RE: FYI

Thanks Kim – I really appreciate the opportunity to respond to these comments.

Thanks, John

From: Garnett, Kim [mailto:Garnett.Kim@epa.gov]

**Sent:** Thursday, May 23, 2013 9:57 AM

**To:** John Cooper **Cc:** Bivins, Dan **Subject:** RE: FYI

John,

Here are two additional questions if you wouldn't mind taking a look at them also.

Thanks,

Kim

- 1 The Statement of Basis states in subsection 4.0(D)(c): "Eli Lilly's stack gases at the Tippecanoe facility averaged approximately 8 percent moisture content and 140 degree F while the multi-metals CEMS was being operated. However, Pall Corporation has assured EPA that trial tests on its CEMS demonstrate that the unit can operate reliably at moisture contents above 40 percent. The only document in the record produced by EPA to support this statement is one email exchanged between Pall and EPA. EPA failed to consider the fact that Pall, which manufactures the multi-metals CEMS, has a financial interest to overstate the CEMS capabilities. No data or objective evidence exist in the record to demonstrate the Xact multi-metals CEMS can operate at moisture contents at or above 40 percent.
- 2- The Xact Muli-Metals CEMS is identified in the Statement of Basis as a system that uses reel-to-reel filler tape sampling technology followed by X-ray fluorescence analysis of metals in the deposit. The Statement of Basis represents that this is the only multi-metals CEMS technology currently commercially available. Pall Corporation is identified in the Statement of Basis as the marketer for the Xact multi-metals CEMS. The Statement of Basis discusses the use of a Xact CEMS at the former Eli Lilly incinerator. Eli Lilly's incinerator and Veolia's Unit 3 are not comparable. Most incinerators Mcluding the Eli Lilly incinerator employ wet scrubbers as their pollution control equiprhent or a combination of wet scrubbers and baghouses. The off gases from incinerators using wet scrubbers have similar moisture and temperature ranges. The suppliers of die Xact multi-metals CEMS claim that the Xact analyzes the off gas emitted from an incinerator to determine the

amount of metals in the emissions stream. Unlike these wet scrubber systems, Veolia operates a dry pollution control system on Units 2, 3 and 4 of its Sauget facility. Dry systems are unique and to my knowledge the only other exclusively dry system in the United States is the Clean Harbors incinerator in Kimball, Nebraska. Veolia's dry pollution control systems operate at much higher moisture and temperature ranges than wet scrubber systems. The Xact multi-metals CEMS has never been demonstrated to successfully operate in the high moisture and high temperature environment presented by Unit 3.

From: Bivins, Dan

Sent: Thursday, May 23, 2013 11:05 AM

**To:** John Cooper **Cc:** Garnett, Kim **Subject:** RE: FYI

Here's another one. Is this one true? Could you say a few sentences about how well it wokrd at Army? Any maintenance issues, etc.?

Dan

EPA's statements that the U.S. Army has successfully installed and evaluated a multi-metals CEMS on one of its hazardous waste incinerators, and that a multi-metals CEMS is an acceptable option in the MATS rule (Statement of Basis at 24) are not correct. A hypertext search of the MATS rule did not show any reference to a multi-metals CEMS. Additionally, while it is correct that the U.S. Army purchased and installed three Xact units, none have ever been used for compliance with Subpart EEE.

From: John Cooper [mailto:jacooper@cooperenvironmental.com]

**Sent:** Thursday, May 23, 2013 10:49 AM

**To:** Bivins, Dan **Subject:** RE: FYI

Dan,

Hoping is nice but reality is sometimes different - it rained all day yesterday and is currently raining.

I will have a response to the comment when you return on Tuesday. John

From: Bivins, Dan [mailto:Bivins.Dan@epa.gov]

**Sent:** Thursday, May 23, 2013 7:00 AM

**To:** John Cooper **Subject:** FYI

Will be on furlough tomorrow and Monday is a holiday for us. Enjoy your weekend! Hope not raining now in Portland!

Dan

Dan Bivins U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Measurement Technology Group 919-541-5244